global insurance market through reinsurance (Laframboise and Loko 2012).

Philippines: Natural Disaster Fund[16]

The Philippines faces significant natural disaster risks, both climate-related natural disasters and earthquakes. On average, more than a thousand lives are lost to natural disasters every year in the Philippines, with typhoons accounting for 74 percent of the fatalities and over 60 percent of economic damages. In 2010 the Philippines passed the Disaster Risk Reduction and Management Law, developing a coherent, comprehensive, integrated, and proactive approach across various levels and sectors of the government and among vulnerable communities across the country (World Bank 2012). The previous national and local calamity funds were redistributed into the National Disaster Risk Reduction and Management Fund (NDRRMF) and the Local Disaster Risk Reduction and Management Fund (LDRRMF).

Thirty percent of the amount appropriated for the NDRRMF is allocated to the Quick Response Fund (a standby fund) for immediate relief and recovery following a natural disaster. The specific amount provided by the Ministry of Finance to the NDRRMF and the appropriate recipient agencies and local government units are approved by the president, in accordance with a favorable recommendation from the National Disaster Risk Reduction and Management Council (NDRRMC). The recipient departments, agencies, or units are obligated to follow existing accounting and auditing rules and to submit monthly statements to the NDRRMC on the NDRRMF's use of funds.

The framework prescribes that no less than 5 percent of the estimated revenue from regular sources be set aside for the LDRRMF to support disaster risk-management activities. As with the NDRRM, 30 percent of the LDRRMF's appropriations are allocated to the Quick Response Fund. Unexpended LDRRMF funds can roll over and accrue to a special trust fund solely for supporting disaster risk reduction and management activities within the next five years. If funds remain unused after five years, they revert to the general fund.

[16]This country case study is based on the National Disaster Risk Reduction and Management Council's "National Disaster Risk Reduction and Management Plan, 2011–2028".

Turkey: Mandatory Earthquake Insurance Scheme[17]

With multiple fault lines passing through the country, Turkey is among the nations most exposed to large-scale earthquakes. In the aftermath of the devastating Marmara earthquake in 1999, which resulted in the loss of 15,000 lives and a substantial macroeconomic and fiscal burden, Turkey's private insurance market was unable to provide adequate coverage. The government faced major financial exposure during the postdisaster reconstruction of private residential and commercial properties, leading to the establishment of the Turkish Catastrophe Insurance Program (TCIP) in 2000. Although it is a nonprofit public entity supervised by the undersecretariat of treasury, the TCIP's operational management is subcontracted to private insurance companies. The TCIP is a conventional indemnity-based catastrophe insurance pool, retaining some of the risk within the scheme and reinsuring the balance in the international market. The TCIP functions as a public sector insurance company with the following objectives:

- Provide nationwide compulsory insurance against earthquakes for all dwellings within the scope of the scheme at an affordable premium.
- Ensure risk sharing within the country and transfer a portion of the risk to the international reinsurance market.
- Reduce government fiscal exposure to the impact of earthquakes.
- Encourage risk mitigation and earthquake-resistant construction practices.
- Accumulate long-term resources to cover catastrophic damages.
- Contribute to the development of insurance.

The compulsory TCIP policy is designed as a stand-alone property earthquake policy with a maximum insured amount per policy and a deductible of 2 percent (to reduce administrative costs associated with small claims). The annual premium rate is determined according to construction type (steel or reinforced concrete, masonry, and so on) and location (five seismic zones throughout the country). As a public-private partnership, the TCIP has become the largest insurance program in Turkey, has reduced the government's fiscal exposure to natural disaster risk, and has raised public awareness about risk mitigation.

[17]This country case study is based primarily on information provided by Ghesquiere and Mahul (2010) and TCIP (2015).

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